

Nolan Carnahan

Bruce Township, MI
ncarnahan1@gmail.com
<https://ncarnahan.github.io>

Summary

Software developer experienced with gameplay and engine programming. Practical knowledge of real-time computer graphics, artificial intelligence, scripting languages, and virtual reality.

Skills

Languages: C, C++, C#, Java, Lua, JavaScript, GLSL

Libraries: OpenGL, .NET

Development Tools: Microsoft Visual Studio, Unity, Git

Art Software: Blender, GIMP, Photoshop Elements

Audio Production: FL Studio, Reaper

Experience

Contract Web Developer

April 2015 — Present

Easy Moving

Bruce Township, MI

Developed a PHP web application for self-scheduling household moving jobs. Deployed application and configured TLS certificate. Integrated automatic payment handling using PayPal.

Engineering Co-op Student

July 2011 — March 2015

Stanley Engineered Fastening

Troy, MI

Total of 24 months work experience. Improved existing desktop testing software, embedded touchpad software, and automated PDFs.

Thesis Project: Independently developed a C#/ASP.NET MVC web application for testing and verifying welding and riveting controls. Implemented a ModbusTCP networking library according to the specification. Integrated Lua scripting for automated testing.

Projects

Portfolio projects can be viewed at: <https://ncarnahan.github.io/portfolio>

Rendering Engine (Independent Study)

Written in C++ using OpenGL. Supports Blinn-Phong shading, normal mapping, tangent generation, draw call sorting, shadow mapping, and deferred shading.

Rift Racing (Independent Study)

Virtual reality racing game created in Unity. Developed interfaces for both virtual reality and traditional screens.

Riftenstein (Independent Study)

Virtual reality first-person shooter created in Unity. Implemented multiple control schemes to compare their suitability for virtual reality.

Edge of No World (Personal Project)

Short platform game written in C++. Implemented asset processing pipeline. Integrated Lua scripting. Designed custom graph format for A* pathfinding.

Education

Bachelors of Science in Computer Science

July 2011 — June 2015

Kettering University

Flint, MI

References available upon request.